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EPA PUBLIC MEETING

PROPOSED CLEANUP PLAN

OUTBOARD MARINE CORPORATION PLANT 2 SITE

WAUKEGAN, ILLINOIS

Report of proceedings had at the Public Meeting of the EPA, held at 95 Jack Benny Drive, Waukegan, Illinois, on the 13th day of November, A.D., 2008, commencing at the hour of 6:14 p.m.

APPEARANCES:

Mr. Mike Joyce
EPA Community Involvement Coordinator

Mr. Kevin Adler
EPA Remedial Project Manager

MR. JOYCE: Good evening folks. Thanks for coming out to listen to our proposed plan for Waukegan Harbor. It will be called the Operable Unit 1 of the OMC site. And, of course, your main attraction is the presentation by the remedial project manager, Kevin Adler, EPA Region 5. And our state partners are here, Tammy Mitchell and Erin Rednour, whose names you'll see on the front of the fact sheet, which hopefully you either picked up on the table in the back or received by mail or e-mail. And, again, thanks for giving up your time today to see the presentation of the proposed plan.

There is a 60-day comment period that will end January 5th. Tonight we'll accept oral comments after Kevin's presentation and after maybe a question-and-answer period. Then we'll invite you up to put oral comments on the record. There are many other ways you can make comments on the proposed plan, either on our Web site, which is listed on the fact sheet. You send it electronically. Or there is an insert in the fact sheet in which you can write it or type it out and send it directly to Kevin at our headquarters, 77 West Jackson, Chicago.

So without further ado, Kevin, I'll turn the microphone over to you, as they say.

MR. ADLER: Yeah. That's right. Thank you, Mike.

My name again is Kevin Adler. I'm the project manager for the Outboard Marine Corporation Superfund site in Waukegan, Illinois. Tonight we're going to talk about a proposed plan to clean up the harbor, which is Operable Unit No. 1, Outboard Marine Corporation Superfund. Everybody is signed in. Get your name on our mailing list. We won't put you on our catalog or sell your name to marketers. But then you'll be on our list to receive our fact sheets in the future about the OMC site.

Very briefly, our cleanup proposal is to completely dredge the harbor where we see PCBs of over 1 part per million and then place a residual sand layer down after things have settled in the harbor to reach a 0.25 surface-weighted average concentration of PCBs that remain in the harbor. And that will be protective of the environment. We estimate that after the work is completed, it will take at least 5 years or perhaps a little more before PCB levels in harbor-caught fish start to fall down to protective levels. Our proposed remedy has an estimated cost of $34-35 million. But the work could be completed in about one dredging season.

The background for Waukegan Harbor -- Can

everybody see the map here? It extends from the approach channel to the outer harbor and in all the way up to the northern harbor extension. Waukegan Harbor is one of the four outdoor units of Outboard Marine Corporation site. The other three are the Waukegan Coke Plant site, the PCB Containment Cells, and the OMC Plant 2 site.

In the color-coded map, you can see the northern harbor piece of the Waukegan Harbor that was originally cleaned up by Outboard Marine Corporation, Operable Unit No. 1. The yellow is the Waukegan Coke Plant site, Operable Unit No. 2. The orange are the three containment cells containing previously dredged harbor sediment, Operable Unit No. 3. And the green is the Outboard Marine Corporation Plant 2 site, Operable Unit No. 4.

Some information about the channel -- or the harbor. There are two pieces to it essentially. The federally authorized channel is composed of different segments called the approach channel, the outer harbor, the entrance channel, the inner harbor, and the inner harbor extension. That also contains nonfederally maintained elements, which include the northern harbor, Slip No. 4 which Larsen Marine operates out of, Slip

No. 1 which the industries operate out of, and then the docking area, and then former Boat Slip No. 3.

This figure sort of shows you all these elements of the harbor except for the approach channel, the outer harbor, the entrance channel, the inner harbor, the inner harbor extension, the federally authorized channel. The north harbor and the docking are not federally maintained nor is Boat Slip No. 1 or Boat Slip No. 4. And this is former Boat Slip No. 3.

The harbor authorized depth currently is -- We've heard different numbers from time to time. Right now it's supposed to be maintained to 18 and 19 feet below mean lake surface. And the Corps of Engineers is supposed to do that, but they are not doing it right now because of the PCB contamination in the sediment. We've heard that Congress has authorized a deeper depth. But before that work can happen, the Corps would have to do an approximately 2-year environmental or economic feasibility study. So right now we're working with the authorized-maintenance levels in the inner harbor.

It's used industrially as we've indicated before (inaudible) and National Gypsum Corporation, that I know of, and recreationally. The harbor has no flow

through. It's not connected to rivers. There is no fresh water or sediment flowing into the harbor. And the walls are made out of sheet pile. And the current depths, as we've indicated, are approximately 18 to 19 feet although there are some deeper areas. The red areas show the deeper areas in the harbor as deep as 20 to 23 feet.

Polychlorinated biphenyl, PCBs, are a contaminant in concern in the harbor sediment and the fish that are caught in the harbor. The origin of the PCBs came from OMC Plant 2. They were discharged into former Boat Slip No. 3 in the 1960s and the 1970s. The State of Illinois discovered this in the '70s and brought action against OMC to stop it. Superfund was enacted in December 1980. And then the EPA moved very quickly with the State to place it on the first Superfund list in 1981.

In 1984, EPA signed a record of decision essentially to dredge the harbor which included a cleanup level of 50 parts per million PCBs. 5 years later, it was changed rather slightly with what happened in 1990-1993 when OMC performed the work. We looked at dredging the material to 50 parts per million PCBs, treating material that was greater than 500 parts per

million PCBs thermally, and send that material off-site for incineration.

Outboard Marine Corporation spent $21 million on the sediment cleanup in 1990 through 1993. They dredged the northern harbor area. The also excavated material on the north side of the OMC Plant 2 property at 50 parts per million and above. They treated the sediment that was again above 500 parts per million PCBs. They put the residual material in Boat Slip No. 3 and in the western and eastern containments cells on the OMC Plant 2 property. Only the northern harbor area was dredged because that was the area that was found to exceed 50 parts per million PCBs.

The good news is PCB levels in the harbor-caught fish fell immediately after the cleanup was completed. You can see there before cleanup, it was a very high level, 19 parts per million on average, in harbor-caught fish. And afterwards, it fell 22 and 10 parts per million PCBs. And these numbers are based on yearly samples taken by the State of Illinois. PCB levels in harbor-caught fish, however, currently exceed recommended levels. The latest fish data not on that chart, 2001 to 2005, show trending a little bit lower than what we saw in the chart. And the bottom feeders

like the carp tend to have more PCBs than the sport fish which don't come in contact with the PCBs in the sediment.

So what about PCBs? What are they? Well, PCBs are chlorinated hydrocarbons that bioaccumulate, biomagnify, and are not easily biodegraded. What does that mean? That means that if you come into contact with them or ingest them in some way, they can stay in your body and not be easily excreted. And they tend to biomagnify over time because they are not easily removed from your body. So if you have 4 parts coming in and you can only get rid of 1 part per day, 3 parts are going to build up in you over time.

They do not easily biodegrade. That means if you leave them out in the environment, naturally occurring bacteria and whatnot find it very hard if not impossible to break them down to an innocuous compound.

PCBs are considered to be a potential carcinogen, and they also have noncancer-causing effects that are worrisome. Cancer effects generally target the entire body, but the brain and liver are more the target sites. Noncancer effects include immunodeficiency problems, thyroid problems, and cognitive or developmental problems or events. In pregnant women,

PCBs can cause developmental problems in either the growing fetus or the growing child.

This model helps us understand how PCB could bioaccumulate. Essentially, the dark blue area we're going to consider to be the PCB-infected harbor. And then the lighter blue of course is the water column. PCBs come in and out of the system by aerial deposition, dust coming from the atmosphere. And also they can slightly evaporate out of the water into the atmosphere. PCBs are not very water soluble. They are very insoluble. But there is still some component that is soluble, so there is a small amount that can be dissolved in the water column. Therefore, fish that swim in it and take that water in to breathe can be exposed to the PCBs; and, therefore, they can biomagnify into the fish.

PCBs in the sediment are a special problem because the organisms that live on the bottom of the mud bed there are exposed to PCBs in the sediment more so than the fish that swim around in the water column. The PCB levels in the sediment are much, much higher than those in the water column. And you also have the problem where fish may consider the benthic organisms to be their lunch and then ingest it, and they're ingesting

PCBs and magnifying them. Then other predators in turn catch the fish and are exposed to PCBs by consuming the fish.

The EPA Superfund is in charge of performing 5-year reviews of cleanup sites whenever material is left on the site above levels allowed for unlimited use of the property -- or residential use of property. In this case, the cleanup in 1990-1993, they left PCBs behind in the three containment cells. So EPA will be doing 5-year reviews for the OMC site for as long as those containment cells are present.

In 2002, we examined the PCB level numbers in harbor fish the State of Illinois provided to us. And we determined that those numbers are still too high to be protective. And, therefore, we drew the conclusion that the 50-part-per-million cleanup level for harbor cleanup is probably not protective. In 2007, we said it was not protective. And we said based on this assessment that perhaps the 0.25-parts-per-million cleanup level would be protective. And the Illinois EPA generally agrees.

Some other notes about the harbor. The harbor is an area of concern by International Oceanic (inaudible). In the Great Lakes, (inaudible)

contaminated sediment and other beneficial use impairments, such as not being able to dredge the harbor to help commerce and so on and forth. The Great Lakes Legacy Act was enacted to address the areas of concern in the Great Lakes. So in between the two 5-year reviews, between 2002 and 2007, we attempted to conduct a Great Lakes Legacy Act project in the harbor in Waukegan. In January 2003 and January 2005, we had sampling events in the harbor of levels of sediment to help determine the extent of residual PCBs in the harbor sediment.

Looking at all those numbers, we see that the sediment currently in the harbor averages only 2 and 3 parts per million PCBs. So that tells us that OMC did a great job the first time around. They removed at least 98, 99 percent of the PCBs in the harbor. And the hottest spot we could find is about 36 parts per million.

I'm sorry for the schematic here. It's also in your fact sheet. It may be hard to read. But, generally, in the outer harbor area, we see only one spot here where we had a contamination level for PCBs above 1 part per million. But as you get closer to the source of the PCBs in the harbor, the numbers tend to go

up.

This figure sort of shows you where the PCB levels exceed levels of concern in the harbor. So you can see that generally in the entrance channel. And then as we get to the inner harbor area and the northern harbor area and the docking area are areas of concern. And I'm sorry. This may be hard to see. It's sort of a 3-D diagram that shows how thick the sediment column is, especially in the docking area and the curve around in the inner harbor area, the amount of impact of sediments present.

In November of last year, Superfund began a new investigation feasibility study for the harbor using the 2003 and 2005 sediment data. A risk assessment had been conducted based on people catching and eating fish containing PCBs from the harbor. We did not assume that people coming into contact with contaminated sediment was a viable way to look at risk in the harbor. The harbor is 18 to 19 feet deep.

We calculated that for an adult eating fish from there, eating approximately 48 meals per year of 2 to 3 ounces of fish per week per meal, the excess lifetime cancer risk for that adult would be about 2 times 10 to minus 4, 2 in 10,000. However, for the

noncancer effects for an adult, we estimated that the effects would be 11 times higher than what we think would be safe. For a child, who is more sensitive to the effect of PCBs on their growing bodies, the level of PCBs in the harbor are 28 times more than we would like to see. And I like to interpret it as the cancer risk is not so bad, but more trouble for the noncancer events that the PCB levels in harbor-caught fish can cause both adults, fishermen, and then children eating the meals.

So based on the results of risk assessment, we feel action is indicated because the risks exceed our target risk range cleanup action. Although the cancer risk is very slightly outside of our risk range, which is usually 1 in 10,000 to 1 in a million excess parts per cancer rate, the hazard index, which is the measurement of the noncancerous effects on human health, are very high. They are much greater than the 1.0 that we wanted to achieve with the cleanups.

And we also know that the fish consumption advisories currently in place are not enough to prevent the PCB exposure. The advisory group is measured in in fisherman fishing in the docks, and they acknowledge eating the fish and they acknowledge that they are aware of the advisories that are in place.

Before we did any thoughts of doing a physical cleanup action, we looked at how long it would take for nature to bring PCBs in the harbor around to levels that would be protective. We estimated it would take almost a century because there is no water flowing into the harbor from a river depositing sediment. So remedial action is indicated. So what are our objectives? We'd like to either reduce the amount of PCBs in harbor sediment so then there would be less PCBs available for harbor-caught fish to bioaccumulate and biomagnify or isolate those PCBs from benthic organisms and fish in the harbor so that they are no longer available to bioaccumulate or biomagnify. And then we would like to prevent the overconsumption of impacted fish over the short term, and that's what the advisory is supposed to be doing.

So our objective would be to either remove sediment that contains PCB levels or levels of concern or place a barrier between the aquatic life in the harbor and the sediment on the bottom of it. Specifically, we see that the risks to people eating the fish in the harbor are about 10 times higher than we would like to see so that the PCB levels of the harbor sediment are about 10 times higher we would like to see.

So we looked at a range of alternatives from no action, doing absolutely nothing, to complete capping of the entire harbor to place a barrier between the contaminated sediment and the aquatic life in the harbor and then a combination of capping and some dredging on up to complete dredging of the harbor areas only where we see the PCB level of concern. The cost of those remedies range from $10 million or so for the complete capping remedy up to $35 million for the complete dredging remedy.

Alternatives 1 and 2. The first alternative is no action, essentially, no further action to deal with the PCB levels in the harbor. We estimate that the harbor PCBs would cause adverse risks for up to 100 years, people catching and eating fish from the harbor.

The complete dredging remedy involves removing harbor sediment that is at 1 part per million PCB or above -- and there's about 200,000 cubic yards of that material in the harbor -- using hydraulic dredging and then placing a residual sand layer after the water has settled down because when you do dredging, you're going to kick up material into the water column; it's going to have to settle. It's going to have a little bit of PCBs

left. The clean sand layer would be between 6 and 8 inches thick. It would be essentially a dilution layer at the end to meet the 0.25 surface-weighted average concentration goal or clean up of the harbor.

Now, we can't remove every PCB from the harbor and they cannot dredge too closely to those sheet pile walls without fear of collapse. So where we cannot dredge and we see material exceeding our cleanup goals, we place a harbor cap, sand, rock, big rocks, on the sediment so that ships going by cannot move them.

And, generally, these are the areas that we're talking about dredging to achieve the removal of sediment containing 1 part per million or above PCBs. And that remedy costs an estimated $34.9 million.

Alternative 3 is a combination of dredging everywhere in the harbor that is used by industry and capping areas of the harbor that are not used by industry. We would still use a hydraulic dredge method to remove sediment that's 1 part per million or above. Then we place the 3- to 5-foot capping material, especially in the northern harbor area. Instead of removing that contaminated sediment, we place our 3- to 5-foot barrier down so the fish swimming in the northern harbor area would not come into contact with that

sediment. And those areas that we did have to dredge and we couldn't remove because it's close to the sheet pile walls, again, we put our armored cap on that material.

Alternative 4, a combination of capping and some dredging, involves some limited dredging in the channel even if it does not enable us to put a 3- to 5-foot armored cap in place. So we've maintained the present depth of the harbor; we've not decreased or increased it. And, again, we have our target of 1 part per million sediment that we would go on to remove.

So, for example, this area here, this area here, all would be dredged only deep enough to allow us to put a 3- to 5-foot cover cap -- armored cap back down so that big ships when they come into the harbor will not be able to stir it up and expose PCBs left behind. The northern harbor area here and the marina area here would be (inaudible) capping because we don't see deep boats going into those areas.

The complete capping alternative assumes that there will be no further heavy industry use of the harbor, and that involves placing a 3- to 5-foot sand and gravel area down over the impacted harbor sediment areas. It doesn't necessarily need to be a harbor. We

assume that the large ships will not be coming in and stirring up that material.

Okay. We examined our five alternatives and evaluated them using the nine criteria. The first step that has to be met by selected alternative is that it has to be (inaudible). We determined that the four alternatives that we looked at, the action alternatives, Nos. 2 through 5, would be protective because they would take action to either remove PCBs from the sediment or place a barrier between the harbor sediment that's contaminated and the aquatic life in the harbor or have a combination of those. The no action one, we did not feel would be protective because for 100 years, we would exceed what we feel to be the protected cleanup level for the harbor.

The second point here sort of deviates a little bit from the fact sheet, and I apologize. We are getting conflicting legal opinions as to whether or not placing capping material in a federal channel would violate federal law or not. So that is iffy, applicable requirements, laws that are passed to deal with cleanups or laws passed to cleaning up the environment.

All the alternatives are easily implemented. The dredging is fairly straightforward. All the action

alternatives are effective; they will reach cleanup goals very quickly. But Alternatives 2 and 3 are the most costly. Another factor that we'll be using to evaluate the cleanup plan is depth and berm grade. The City would prefer no deepening of the harbor. Number 2, industry would prefer to maintain or increase the harbor depth. So we have these conflicting entities. National Oceanic Atmospheric Administration is a federal agency. It's our natural resource trustee. It's their opinion that we should maintain or increase depth to congressionally authorized levels to maintain commerce in the harbor.

So we propose to use remedy Alternative No. 2, which is the complete environmental dredging of the harbor to remove PCBs that are at 1 part per million and above in the harbor sediment, placing a residual sand layer down or a final mixing layer to achieve the 0.25 surface-weighted concentration cleanup goal for PCBs and sediment that's left behind. The surface-weighted average concentration is what is the average concentration of PCBs in a 12-inch layer of sand on the surface of the bottom of the harbor. Those are the areas that are more likely for benthic organisms to come into contact. And, again, we would place an armored cap

along the seawall areas where we couldn't dredge and that exceeded our cleanup standards.

So, generally, we would try to -- not try to, we would dredge out these yellow areas and small red areas there. Those areas are where we see PCBs that exceed 1 part per million. Once the dredging is done, we put our residual sand layer in these areas. It can be completed in one construction season at an estimated cost of almost $35 million. And, again, it would not remove all PCBs from the harbor.

Some other considerations was -- were off-site disposal of the dredging material would be too expensive to put into a truck and haul it to a landfill. So we would place the material on the OMC Plant 2 property where the eastern and western containment cells currently are. We believe that would fit in with the City's redevelopment plans for the property in the future. Hydraulic dredging is more cost effective than mechanical dredging; and, therefore, we can get work done in one season. If we had to use a mechanical dredger, we probably would need two units and may need to go into two seasons of work.

I put this photograph up to show you the approximate area where the dredged sediment would be

piped to via water and then left. After all the water is removed, we would put 3 feet of clean dirt over it and then the City would be able to use it for a garage or a park.

Some other considerations are natural-occurring materials in the sediment contain organic compounds -- or particles, leaves and twigs and whatnot, a lot of dead fish. When you get below a certain level of the sediment, an anoxic or oxygen-free condition, so you start to create ammonia as the material degrades. So when we go in with the hydraulic or mechanical dredger, we're going to stir up that material and release ammonia to the water that we will be removing along with the sediments that are contaminated.

Hydraulic dredging, we would be removing approximately 5,000 gallons per minute of water along with the sediment. That's a large volume of water to deal with. The discharge number or level for ammonia into the lake is very, very low to protect aquatic life. It's a little bit higher in the harbor. Our engineers have found that to treat that volume of water to remove enough ammonia to be discharged into the lake would be very, very costly, very, very hard to do, and probably

and not even effective to be able to do so. It would still exceed ammonia levels for discharge into Lake Michigan.

So we would probably have to invoke a waiver of State's discharge level for ammonia to do this remedy, which we are allowed to do under Superfund. We would filter the water to remove particulate matter and then diffuse that back into the harbor and spread it out over the entire water area. (Inaudible. Blower turned on.)

THE COURT REPORTER: I can't hear you at all.

MR. ADLER: Now, between Alternative 2 and Alternative 3, the cost difference is about $1.9 million. Alternative 3 involves capping the northern harbor area. And, therefore, it is slightly less expensive because we're not removing as much material and having to dispose of it on the OMC Plant 2 property.

AUDIENCE MEMBER: We can't hear you.

MR. ADLER: But we are going to (inaudible) material piped down into the water column (inaudible).

THE COURT REPORTER: Mr. Adler, I can't hear you at all. Do you mind using the microphone?

MR. ADLER: I was saying to be or not to be.

We felt that Alternative 2, removing the material from the harbor, was the more permanent way to address it rather than --

(Short interruption.)

MR. ADLER: Thank you.

We felt that Alternative 2 would give us a more permanent approach to removing material from the harbor rather than covering it up and leaving it there for somebody else to manage over the next 50 years.

Who is going to pay for this? The taxpayer, EPA, business. The EPA the will pay 90 percent of the cost, and the State has to have a 10 percent cost match.

After the comment period is over January 5, EPA will evaluate all your comments and try to have a decision on the cleanup action by the end of February 2009. And then budget problems, we'll work out in Washington when we begin to design the cleanup remedy and start that work in late 2009 or 2010 and be cleanup ready in 2010.

And then once the work is completed, 5 or so years later, the PCB levels in harbor-caught fish will start to fall. Right now it's unknown how long it will take to get to protective levels. But what we want to see is them to start to fall because as they

start to fall, it becomes more and more protective for human health.

Now, just because we're cleanup ready in 2010 doesn't mean it's going to happen in 2010. Because of the potential cost of the remedy, it has to be prioritized by an EPA panel who rate the sites with regards to risk. With the more obscure conditions, 10 get funded first. So, for example, if people are drinking contaminated water in a subdivision, that remedy would probably be funded before the harbor cleanup would be funded.

Any questions before I give you the quiz? I gave you a lot there. There's a lot to think about. I'll be happy to stay here as long as we need to to answer your questions. And, afterwards, Michael will run the comment part of this.

AUDIENCE MEMBER: Question.

MR. ADLER: Yes.

AUDIENCE MEMBER: You said that the share was 90/10, federal/state. Is it truly a state share, or is it just merely a nonfederal share?

MR. ADLER: Superfund is 90 percent federal, 10 percent state. As far as I understand, the State has the capability to accept money from other entities, set

up a special account within the state, and then use that as their matching funds for a cleanup action.

AUDIENCE MEMBER: I have a question about the purpose of this meeting. I expected you guys to kind of come and present all the alternatives. But you spent a lot of time on Alternative 2, and we didn't hear much about the other ones.

MR. ADLER: Do you want to hear more about the others one?

AUDIENCE MEMBER: Well, I was just wondering, wasn't the purpose of the meeting to hear about all the alternatives available?

MR. ADLER: Fair enough. We looked at a suite of four action alternatives.

AUDIENCE MEMBER: You said -- I listened to all that. You don't have go back over the slides. I just wondered is there more information on the fact sheet than what you presented on the other alternatives?

MR. ADLER: There's more information on the fact sheets, and there's also the capability study that was placed into the Waukegan Library administrative record.

AUDIENCE MEMBER: We might point out that you had another meeting prior to this meeting in City Hall where you presented all the alternatives in depth.

MR. ADLER: She has a fair point that we really didn't go into each one in depth as we did for Alternative 2 and only because each alternative looks at a certain amount of capping and a certain amount of dredging. As you go from one end to the next, it's the same kind of work happening but there's more of it happening in Alternative 2 than Alternative 4. So I did not spend a lot of time on what are the exact differences between the alternatives.

AUDIENCE MEMBER: You do want the public to comment though on all the alternatives, correct?

MR. ADLER: I want the public to comment as to which one they think is preferred. We're not telling you what to tell us. We're telling you what we believe is the effective one.

AUDIENCE MEMBER: So will the dredge water treatment meet all other standards of discharge into Lake Michigan, as ammonia.

MR. ADLER: It will be into the harbor. And it would be all the ones we can meet effectively. I don't have an idea about what other compounds of concern may be present until we --

AUDIENCE MEMBER: So there may be others?

MR. ADLER: Ammonia is one of concern, the main one

of concern. We did do some testing taking some sediment out of the harbor and placing them into containers so we could see the concentration of compounds in the water that resided in that sediment. And ammonia was the main one of concern. We didn't have anything else --

AUDIENCE MEMBER: Mercury.

MR. ADLER: Mercury --

AUDIENCE MEMBER: Mercury is so low that (inaudible).

AUDIENCE MEMBER: What are the standards that you are trying to meet in particular, state standards, federal standards?

MR. ADLER: State discharge standard.

AUDIENCE MEMBER: But there may be more than just the ammonia?

MR. ADLER: There may be. We saw mercury in the water, but it was so low that there's no way you can beat it.

AUDIENCE MEMBER: How was the mercury in the fish? Did you measure that?

MR. ADLER: I think we've tested the fish.

And, Erin, do you recall if we tested for anything else besides the PCBs in the fish?

ILLINOIS EPA REPRESENTATIVE: There was one year

that we tested for mercury, and it wasn't specific to the harbor. It was along the whole coastline. We were consistent with the other states in mercury. We tested all along the coastline. The mercury content was consistent with what we see in fish all around the lake. So we subscribe to the lake fish consumption advisory too.

THE COURT: So even if you clean up all the PCBs, the fish in the lake, you still shouldn't be eating because of the mercury?

ILLINOIS EPA REPRESENTATIVE: Certain types of fish, yes.

AUDIENCE MEMBER: Rick Larsen. I'm one of Waukegan's aldermen. And I want to say up front that I'm a proponent of the capping option. This is taxpayers money that we're proposing using on cleaning up the harbor. But why don't you explain the other parts of the lakefront cleanup that we are facing, other than just dredging the harbor, and the estimated cost of what we're faced?

MR. ADLER: Sure. Okay. Let me go back to one of my maps. Waukegan Harbor, again, is the first operable unit of the OMC cleanup site. $21 million has already been spent by Outboard Marine in order to clean up the

harbor. The Waukegan Coke Plant site is being cleaned up by two former operators of the Coke Plant, North Shore Gas and General Motors Corporation. The cleanup remedy was selected, as you know, in September 1999. At that point, the estimated cost was about $27 million to clean up soil and groundwater. The soil has already been cleaned up to the cleanup standards making the surface available for the development you so choose to right now. The groundwater cleanup has just started. EPA is not paying for this work. General Motors and North Shore Gas are.

Operable Unit No. 3, there's essentially not too much cost involved with that. The City has agreed to do the routine operation and maintenance of those cells which involves making sure that the water levels in the material inside the cell, the groundwater levels are lower than the water levels outside. So if there is ever a leak in that cell, the water comes in and the contamination does not go out. I don't know how much you spend per year doing that operation, but I would imagine it's probably $50,000 a year.

OMC Plant 2, I was here in January of 2007 with a cleanup plan for the building and the soil. And at that point, we estimated it would be about

$20-odd million to knock down the non-PCB contaminated building and to clean up PCB and other organic hydrocarbon-contaminated soil outside of the building. Our current estimate because costs of disposal have risen so high and because we found asbestos-containing material in that factory than we had thought of finding is about $34 million just to knock down the building that's remaining that the City has not knocked down and to dispose of it properly and to clean up contaminated soil and dispose that properly off-site.

In August of this year, I was here to announce our proposed cleanup plan for the groundwater and a dense nonaqueous phase liquid containing trichloroethylene, a pool of solvents beneath the property. And that remedy is about $12.7 million.

So if you add it all up, there's one big area, one big site, you're looking at about $120 to $130 million.

AUDIENCE MEMBER: Is one of the concerns of the OMC Plant site the contaminants leaching into the harbor water and the lake water?

MR. ADLER: Well, there's concern on two of the pieces of the site. Let's start with the Coke Plant site. We have a plume of water here beneath it because

of the operations of the manufacturing of gas and natural gas and then manufacturing coke for coke ovens. We see arsenic contamination and benzene contamination in the groundwater at that site. So we're concerned that if the arsenic levels and the other -- the ammonia levels also -- I'm sorry -- were not addressed that you would exceed standards for ammonia and arsenic in the harbor and/or Lake Michigan. So the groundwater is going to be cleaned up. And we estimate in the next 3 to 8 years we'll be pumping groundwater out, treating it so we reduce the ammonia levels, reduce the arsenic levels, and then reinjecting that into the ground.

The OMC Plant 2 property has a large groundwater contamination beneath it that's mostly trichloroethylene-chlorinated solvents and breakdown products including biochloride (phonetic). We are concerned about that plume because when you are on this piece of the property, the direction of groundwater flow tends to be towards the south, towards the harbor, onto Larsen Marine Service. When you are on the eastern side of the property, groundwater flows into Lake Michigan. Right now, we don't see any evidence at Larsen that there is contamination going into Lake Michigan or the harbor at this point. Once this building is removed,

there may be a little bit faster movement of groundwater and then you may start to see some.

AUDIENCE MEMBER: I think it's important to let everybody know what kind of money we're talking about.

MR. ADLER: Right.

AUDIENCE MEMBER: And the way it will be come up with.

AUDIENCE MEMBER: Can I ... There is still contamination on the OMC site, which will be taken care of when, when the EPA budget allows it? Well, because I think you made a good point that it will leach back. And you talked about (inaudible) in 5 or 10 years.

AUDIENCE MEMBER: That was the question I was going to ask, is that whether it's 9.6 million or 34.5 million to clean up the harbor, we all sort of put that on the side and deal with the OMC problem first because we could expend 9.6 to 34.5 million and do one of these alternative remedies here and Plant 2 is still standing there. And, God forbid, if something happens and it collapses, you would have PCB materials going right back into the harbor.

MR. ADLER: I understand. And, again, my job is to make sites ready to be cleaned up and get it to the point where it's eligible for funding. And then the

sites get ranked according to risk because money is in short supply. And those pieces of the site that have more potential risk to human health and environment would be funded first. So if you recall the risks for human health in the harbor, the cancer risk was not so bad, the noncancer risk was sort of troubling, I would estimate that the harbor would not be ranked above OMC Plant 2 demolition and certainly wouldn't be ranked above the groundwater problem.

AUDIENCE MEMBER: I want to ask a couple of questions about the measurement of the fish and how they come up with these measurements of contamination in the fish itself. Do they measure -- I'm a fisherman. I know how to use a fillet knife to fillet a fish. I've heard rumors to the effect that they take the whole fish and come up to the levels of contamination rather than the fillet which everybody eats.

MR. ADLER: Our assumptions for risk assume that a fisherman will be properly filleting a fish, that you will be cooking it so that the oils and fats, which would contain the PCBs more than the lean pieces would, drain off and you would not be using that. Perhaps 50 percent of the PCBs that are essentially available in a harbor-caught fish would not be consumed by a

fisherman.

AUDIENCE MEMBER: I can't hear you.

AUDIENCE MEMBER: I can't hear you at all either.

MR. ADLER: I'm sorry. We assume that fishermen would be properly dressing the fish before consuming it that half the PCBs would be not consumed because the fat pieces would not be consumed and the cooking allows for further fats to drain away. And that's where PCBs tend to accumulate.

AUDIENCE MEMBER: Kevin, I think it would be helpful if you would explain on the maintenance of the OMC Plant and when that obligation of the City ends. I think it might be helpful if you would explain that to the audience.

MR. ADLER: I don't know how that's relevant to this particular cleanup approach. But, right now, EPA has an agreement with the City of Waukegan regarding the maintenance of the remaining building on the property. And when does that run out?

AUDIENCE MEMBER: It runs out at the end of 2010.

MR. ADLER: 2010. So, after that, the City's agreement with EPA expires. Right now the City along with the routine maintenance of the PCB containment cells also is in charge of security to prevent

trespassers from breaking in and not coming into contact with the contaminated material in that building.

AUDIENCE MEMBER: Well, Kevin, it's relevant because on page 13, you quote -- at page 13, you say, as the building falls into disrepair, it is predicted that the PCBs therein in the OMC Plant building that the City is going to maintain it. We all know that it will eventually migrate into the environment. You've more than made that finding.

MR. ADLER: All right. Agreed.

AUDIENCE MEMBER: Was there any concern with Option 5 with 3 to 5 feet of rock and sand that it would press that clay sediment and allow it to seep through.

MR. ADLER: The question was with the placement of 3 to 5 feet of material into the harbor, was there a concern that placing that material on top of the sediment can compress it and therefore make it more available to come back up into the water column. The reason we're doing 3 to 5 feet is to help prevent that from happening.

AUDIENCE MEMBER: (Inaudible.)

MR. ADLER: It's just gravel, right.

AUDIENCE MEMBER: It'S just a combination of just sand and gravel material?

MR. ADLER: Yes. Well if it's a true cap that you're talking about, a landfill cap, you're talking about like a plastic layer first and then material on top of that and then a growing layer, you wouldn't be able to put a true cap, landfill cap in the harbor.

MR. JOYCE: Any further questions? We'll have a comment period if anybody wants to go ahead.

AUDIENCE MEMBER: A long time ago we discussed signs by the lake regarding the level of the fish. And remember that was kind of muted with all this going on? Do you think there's a chance that the signs would be put up at the lake?

MR. JOYCE: Well, there are some signs.

AUDIENCE MEMBER: There are no signs. And I was wondering if they are going to put the signs up especially with everything that's going to be going on there?

MS. MITCHELL: The signs that were originally put up were put up by Lake County Health Department. And as far as answering the question, I can't answer that for you.

AUDIENCE MEMBER: And we had brought up at that time that it be based on the mercury level of the fish in the lake. We also have a lot of people here in

Waukegan who do their financial -- you know, depend a lot on fishing, you know, to supplement their diet. And you're talking about in English and Spanish. But we were talking about the signs being put up. Do you know how long they were up, Tammy, if they were up?

MS. MITCHELL: I know they were taken down in '97. I think they were put up in '93, '94, about the same time the dredging occurred.

AUDIENCE MEMBER: When I got off the committee in '99, there were no signs; I remember that. So I think that's one thing we need to talk about. There really needs to be signs put up again.

MR. JOYCE: If anybody would like to make an oral comment. You see we have a court reporter, so you won't have to write it up longhand or send an e-mail or any of that stuff. So if you're going to make a comment, state your name and the town you're from.

MS. BADILLA-RASS (phonetic): I'm from Waukegan. I was on the EPA advisory committee, the chairperson. And at that time, we had discussed the signs. We had also discussed grants too. We never got that either. That's another thing that was discussed, was grants for the community as far as providing this information to the community through workshops or different presentations.

I would like to see the signs regarding the level of mercury in the fish population and the PCBs at Waukegan Marina Harbor in English and Spanish. Thank you.

MR. JOYCE: Anybody want to make an oral comment to save you writer's cramp or laboring over your PC at night?

MR. BIEHL: My name first, Paul Biehl. My first thought that, to my knowledge, this harbor is a harbor of refuge, to just start out right with that. And I don't believe capping is a foolproof answer as far as the health and safety. My thought is a complete dredging seawall to seawall to eliminate the residual PCBs. And I don't understand why new steel sheeting can't be driven to prevent the collapse of the seawalls that was mentioned. And that's the end of my comment -- Or once. Do it once, do it right.

MR. GUIZELHART (phonetic): My name is Paul Guizelhart. And my concern is recontaminating the harbor from the properties adjacent to the harbor if we restore activity. That's all.

MR. BRAZEN: I think the presentation actually showed a history of dredging and redredging. And I think we're getting the cart before the horse because PCBs keep reappearing. So I don't think we should

constantly be dredging the harbor as a result of the PCBs that show up either from hot spots or from leaching. That's all.

MR. RAY VUKOVICH: I'm director of governmental services, City of Waukegan. After looking at all of the alternatives that are here tonight, the one that most closely aligns with the City of Waukegan master plan for the lakefront would be Alternative No. 5. As I said earlier, you would need to put that aside and make sure that the OMC Plant No. 2 were fully remediated and then look at the capping of the harbor. Thank you.

MR. JEFF JEEP: I represent the City of Waukegan. I just want to make two points.

(Short interruption.)

MR. JEFF JEEP: I'm just going to speak very loud. I'm legal counsel for the City of Waukegan, and I want to make two points. The first point relates to the extension of the public comment period. It think we should extend the public comment period until February 11, 2009. Then I want to come back to the north plant and emphasize again the importance of doing PCBs there first before we spend 9.5 million or 36 million on this harbor only to have it recontaminated again.

First let me go through the reasons why I think we should have more time to look at this. This is a momentous decision in the history of the City of Waukegan and the Great Lakes. The National Contingency Plan, which governs the public comment period, mandates a reasonable opportunity for public comment. At a minimal, we should have 60 days. So at a minimal, we should take this out until like -- I don't have the date calculated. It's January -- It would be 5 or 6 more days if you started the public comment from today. So, legally at least, you have to extend it 60 days from today because I'm asking you to. Anytime a member of the public asks, you have to extend it. But it should go beyond January and into 2009 for the following reasons. These are a few reasons.

But let's recap a little history here. About the moving target that we've had on costs for this harbor, I'm going to take you back to 2003 when the Army Corps of Engineers first approached the City of Waukegan about participating in a dredging project here. The estimated cost then was $11 million.

That was followed in May of 2003 by a stop-work order that the U.S. EPA issued to the City. And the other part, the OMC Plant, was to stop what

we're doing. We lost the construction season. We incurred hundreds of thousands of dollars of extra costs while we evaluated the option of placing all this material on top of the landfill, which was determined to be an ill-conceived idea. I'll leave it at that. That was proposed to us as not costing the City anything as it was initially presented by the U.S. EPA. This is a no cost option, a free ride for the City.

By the time we got done doing our calculations after the cost increase from 11 to 12.5 million, we calculated that we paid our local share and incurred the extra costs at the landfill; the project would have cost the City $10 million. That was in 2004 that the City rejected that dredging project. In November of 2004, the Army Corps came back with another project now saying the dredging project would be $24 million. So it's gone from 11 to $24 million dollars.

In June of 2007, when the City was negotiating with the U.S. EPA for another dredging project, the cost went up to 39 million. And the City's share of that would have been 14 million, 35 percent, which would have been an uncapped obligation if it cost 45 million or whatever.

So our concern is we have seen a moving target

here with costs. Whoever is paying for this, whether it's taxpayers or the PRPs around the harbor pay for it, we should be conscious. We should pay careful attention to costs. And we need more time to evaluate these costs given this history of a moving target.

Second, will it work? Will we achieve the sweat which we're doing all of this for? If you look at the City of Waukegan's position paper here, which has been there since September of 2007, we have there in Footnote No. 5 correspondence between the City's consultant and the U.S. EPA where we're both discussing we're not sure this is going to work. We're not sure we'll achieve the sweat. And we need to know what has changed now from the last time we looked at this. We don't want to spend this kind of money, still have the levels of PCBs in the sediment, still be an area of concern, and just have wasted all this money. So we have to be convinced this is going to work. That takes time for us to look at these documents, and we need more than the 60 days which you've given us.

There are political land use issues that are being decided here. As we said in our public position paper that's been posted on our Web site, these are political questions that should be decided not just by

the U.S. EPA but by others. U.S. EPA is an expert administrative agency dealing with environmental issues; they're not a land use agency. They're not an economic development agency.

One very serious concern on our part is that industry has received a sneak preview on this cleanup. We know that from speaking with their lawyers that industry has been meeting with U.S. EPA and going through this plan. We have not been part of that. You-all have not been part of that. But there are private discussions that have been going on. And now we are presented with a recommended alternative although industry and EPA had a meeting to discuss this outside of this public forum. And, again, I know that directly from conversations with their legal counsel.

So the City had submitted a Freedom of Information Act request to the U.S. EPA. We submitted that on November 6th for not just the (inaudible) but their entire file, all of their correspondence, their correspondence with third parties including industry. We want to know the whole picture, what's going on, as all you should. So we think it is reasonable that this decision be extended until February 3rd, 2009.

Finally, I just want to reemphasize again the

second point that it is unconscionable that we would spend this kind of money when we know that the north plant, which has such high concentrations of PCBs, you need a respirator to go into that building. And we know that that roof is going to start collapsing and the building is going to start deteriorating and that storm water is going to wash all of that stuff right back into this harbor. I don't even know how we're thinking about dealing with this harbor until we come up with the $35 million to deal with that building.

We will follow up in writing, and we would like a determination from the agency obviously on our request for an extension of the public comment period.

MR. JOYCE: Can you be loud?

MS. VERENA OWEN. I can be loud.

I spent 2 and a half years on an EPA task force. I was appointed one of six environmentalists on the task force that was put together to review federal (inaudible). We spent considerable time thinking about public participation in processes. And we issued a 300-page report that suggested various movements in public participation.

I think the fact sheet was deceiving. I read it. And it started off with the OMC site, and it gives

a little bit of the history on the site. So you think you could come (inaudible) to a summary of site contamination. That's what this is all about. As you know, clearly it is not. And to leave out critical information about the cost of cleaning up the (inaudible) from contamination, I think it leaves the folks (inaudible) in cleanup of the OMC site, which we were given to be this was all about. As I said before, I thought the presentation was interesting but slanted. I was very troubled, and I certainly support this request to extend the public comment period.

Thank you very much.

MR. JOYCE: More comments? The more the merrier. Going once. Going twice. Okay. I guess that's it, folks. Thank you for coming. We appreciate it.

STATE OF ILLINOIS)
) SS.
COUNTY OF COOK)

Sharon Valli, being first duly sworn, on oath says that she is a Certified Shorthand Reporter doing business in the City of Chicago, County of Cook and the State of Illinois;

That she reported in shorthand the proceedings had at the foregoing Meeting;

And that the foregoing is a true and correct transcript of her shorthand notes so taken as aforesaid and contains all the proceedings had at the said Meeting.

_____
SHARON M. VALLI, CSR

CSR No. 084-004551

SUBSCRIBED AND SWORN TO
before me this 24th day of
November, A.D., 2008.

_____
NOTARY PUBLIC